

FERTILIZER SPRINKLING SYSTEM USING UAV

A Project report submitted in partial fulfillment of the requirements for the
award of degree of

BACHELOR OF TECHNOLOGY IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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(Accredited by NBA,NAAC,Approved by A.I.C.T.E,Affiliated to JNTUK)

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BONAFIDE CERTIFICATE

This is to certify that project work is entitled "**FERTILIZER SPRINKLING SYSTEM USING UAV**" in partial fulfillment for the degree of bachelor of technology in ELECTRONICS AND COMMUNICATION ENGINEERING, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an benefited work carried out by B.PAVANI, M.PAVANJOGINAIDU, N.NAVEEN, G.HARISH under the guidance and supervision during 2015-2019.


PROJECT GUIDE

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ABSTRACT

Groundwater is a main source for supplying drinking water. High concentration of fertilizer originated in soils accumulated through irrigation water causes negative impacts on the agricultural environment, soil-grass quality, livestock and fishery production and on the food chain. Fertilizer plays an important role in increasing agricultural production. Over-fertilizing has a negative effect on water quality which in turn negatively affects the health of the people and animals who use it.

The purpose of this project is to develop a methodology that has the potential to reduce the amounts of fertilizer used and thus to have secondary environmental benefits. This is done by using Unmanned Aerial Vehicles (herein after UAVs). Comparing several images, the resulting data can be used, the amounts of fertilizer needed can be optimized by analyzing the spatial growth patterns of the cropland. Here project describes the development of quad copter UAV and the sprayer module. It describes the integration of sprayer module of 500gms to quad copter system .This model is used to spray the pesticide content to the areas that can't easily accessible by humans.